

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : JM Pump NEMA Premium Efficiency Three-Phase Product code : 13374122

Frame	: 182/4JM	Cooling method	: IC411 - TEFC
Insulation class	: F	Mounting	: F-1
Duty cycle	: Cont.(S1)	Rotation <sup>1</sup>	: Both (CW and CCW)
Ambient temperature	: -20°C to +40°C	Starting method	: Direct On Line
Altitude	: 1000 m.a.s.l.	Approx. weight <sup>3</sup>	: 34.8 kg
Protection degree	: IP55	Moment of inertia (J)	: 0.0118 kgm <sup>2</sup>
Design	: B		

Output [HP]	1.5	1.5	1.5
Poles	6	6	6
Frequency [Hz]	60	50	50
Rated voltage [V]	230/460	190/380	220/415
Rated current [A]	4.44/2.22	5.18/2.59	4.73/2.51
L. R. Amperes [A]	30.6/15.3	29.5/14.8	29.8/15.8
LRC [A]	6.9x(Code K)	5.7x(Code H)	6.3x(Code J)
No load current [A]	2.73/1.36	2.69/1.34	2.74/1.46
Rated speed [RPM]	1170	955	960
Slip [%]	2.50	4.50	4.00
Rated torque [kgfm]	0.930	1.14	1.13
Locked rotor torque [%]	240	190	220
Breakdown torque [%]	340	260	290
Service factor	1.15	1.15	1.15
Temperature rise	80 K	80 K	80 K
Locked rotor time	99s (cold) 55s (hot)	0s (cold) 0s (hot)	0s (cold) 0s (hot)
Noise level <sup>2</sup>	52.0 dB(A)	50.0 dB(A)	50.0 dB(A)
Efficiency (%)	25%	82.8	84.4
	50%	84.0	84.2
	75%	86.5	85.6
	100%	87.5	84.9
Power Factor	25%	0.29	0.34
	50%	0.50	0.58
	75%	0.63	0.70
	100%	0.71	0.76

	<u>Drive end</u>	<u>Non drive end</u>	Foundation loads	
Bearing type	: 6207 ZZ	6205 ZZ	Max. traction	: 51 kgf
Sealing	: V'Ring	Without Bearing Seal	Max. compression	: 86 kgf
Lubrication interval	: -	-		
Lubricant amount	: -	-		
Lubricant type	: Mobil Polyrex EM			

### Notes

USABLE @208V 4.91A SF 1.00 SFA 4.91A

This revision replaces and cancel the previous one, which must be eliminated.

- (1) Looking the motor from the shaft end.
- (2) Measured at 1m and with tolerance of +3dB(A).
- (3) Approximate weight subject to changes after manufacturing process.
- (4) At 100% of full load.

These are average values based on tests with sinusoidal power supply, subject to the tolerances stipulated in NEMA MG-1.

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# LOAD PERFORMANCE CURVE

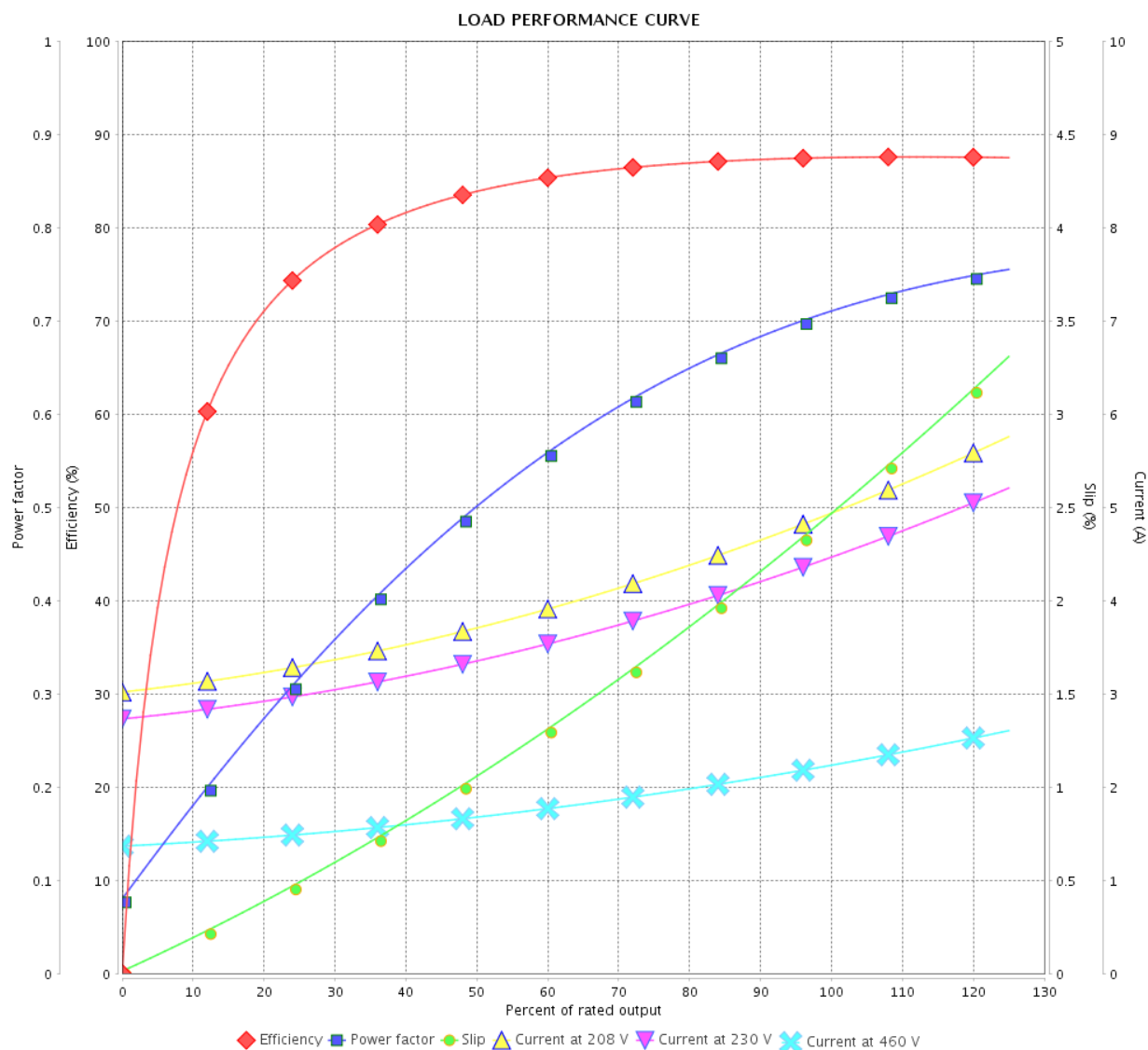
## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : JM Pump NEMA Premium  
Efficiency Three-Phase

Product code : 13374122



Performance : 230/460 V 60 Hz 6P

Rated current : 4.44/2.22 A  
 LRC : 6.9  
 Rated torque : 0.930 kgfm  
 Locked rotor torque : 240 %  
 Breakdown torque : 340 %  
 Rated speed : 1170 rpm

Moment of inertia (J) : 0.0118 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.15  
 Temperature rise : 80 K  
 Design : B

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# LOAD PERFORMANCE CURVE

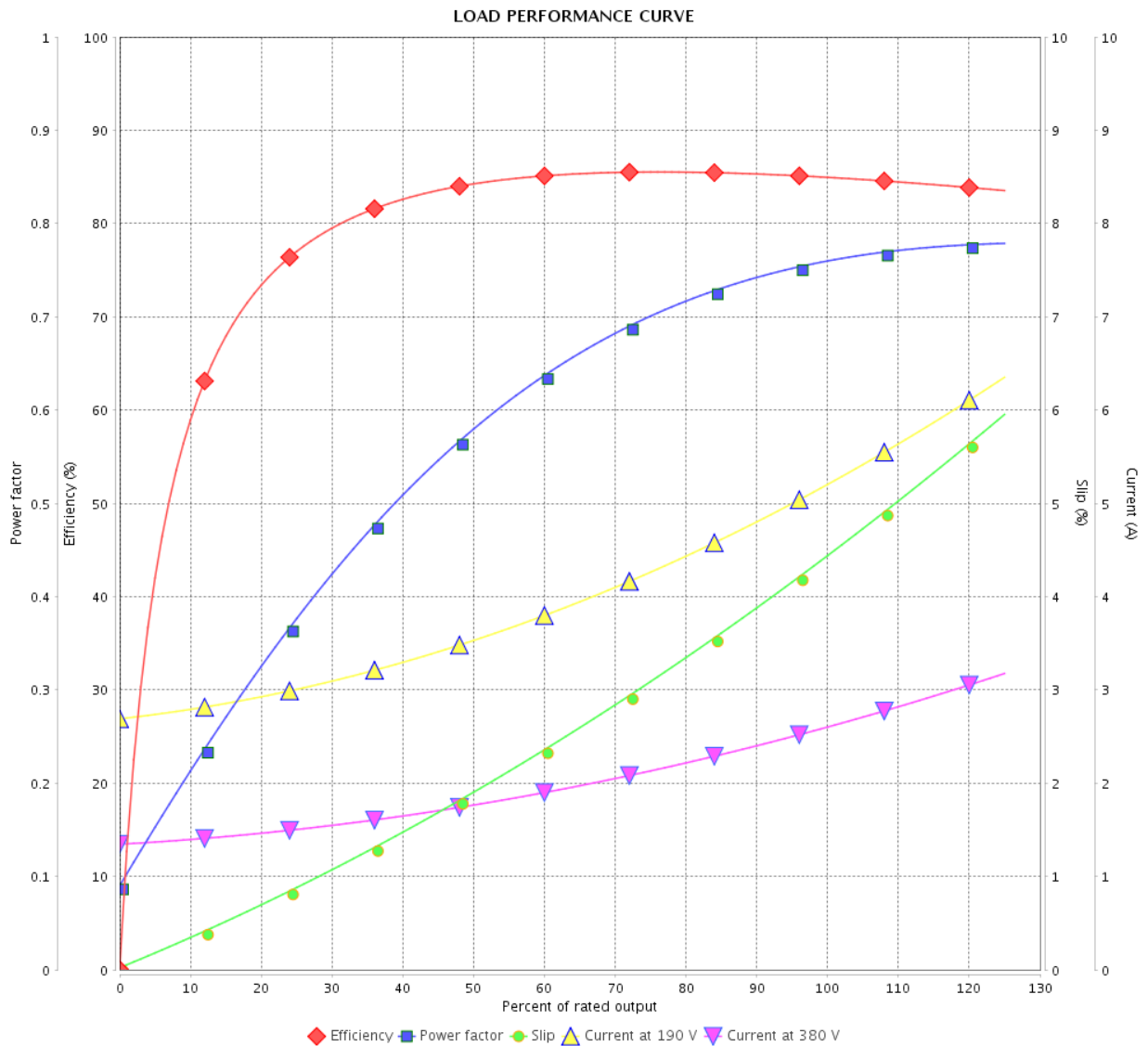
## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : JM Pump NEMA Premium  
Efficiency Three-Phase

Product code : 13374122



Performance : 190/380 V 50 Hz 6P

Rated current : 5.18/2.59 A  
LRC : 5.7  
Rated torque : 1.14 kgfm  
Locked rotor torque : 190 %  
Breakdown torque : 260 %  
Rated speed : 955 rpm

Moment of inertia (J) : 0.0118 kgm<sup>2</sup>  
Duty cycle : Cont.(S1)  
Insulation class : F  
Service factor : 1.15  
Temperature rise : 80 K  
Design : B

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# LOAD PERFORMANCE CURVE

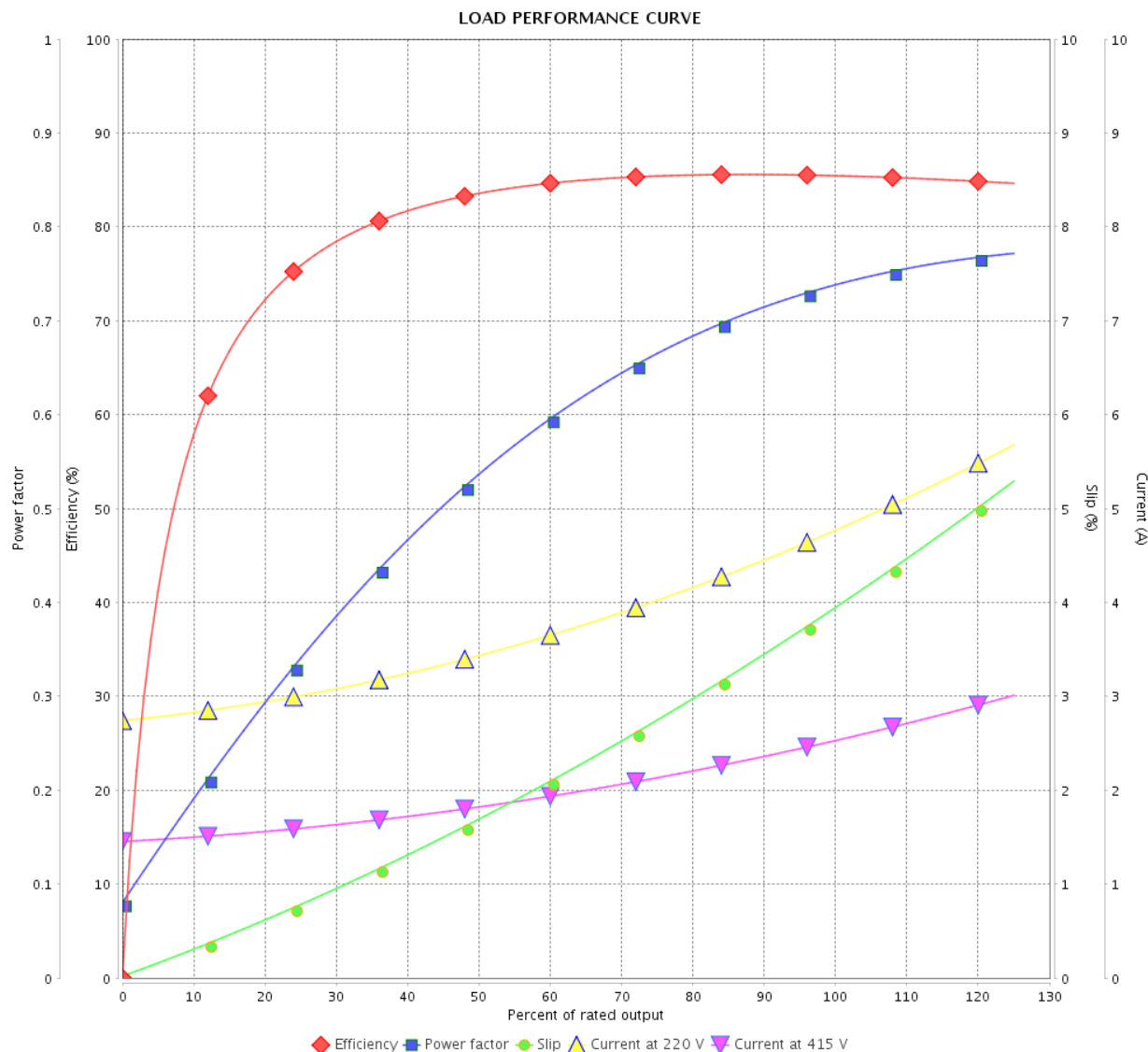
## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : JM Pump NEMA Premium  
Efficiency Three-Phase

Product code : 13374122



Performance : 220/415 V 50 Hz 6P

Rated current : 4.73/2.51 A  
LRC : 6.3  
Rated torque : 1.13 kgfm  
Locked rotor torque : 220 %  
Breakdown torque : 290 %  
Rated speed : 960 rpm

Moment of inertia (J) : 0.0118 kgm<sup>2</sup>  
Duty cycle : Cont.(S1)  
Insulation class : F  
Service factor : 1.15  
Temperature rise : 80 K  
Design : B

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